

### CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

#### Listing of Claims:

Claims 1-6 (canceled)

Claim 7 (currently amended): A device for protecting an electronic module ( ~~$\mu$ C~~, ~~C-T~~, ~~T2~~) disposed in a control device (~~ST~~) in a multi-voltage on-board electrical system (~~12V/42V~~) having an accumulator (~~BAT1~~) with a low on-board electrical system voltage (~~V<sub>bat1</sub>~~) against short circuiting to a high on-board electrical system voltage, comprising:

a MOSFET transistor (~~T1~~) having a drain source path (~~D-S~~) inserted between a control device connection (~~A~~, ~~A1~~, ~~A2~~) and a connection (~~E~~, ~~E1~~, ~~E2~~) of the electronic module ( ~~$\mu$ C~~, ~~C-T~~, ~~T2~~), and with:

a source (~~S~~) connected to the connection (~~E~~, ~~E1~~, ~~E2~~) of the electronic module ( ~~$\mu$ C~~, ~~C-T~~, ~~T2~~);

a drain (~~D~~) connected to the control device connection (~~A~~, ~~A1~~, ~~A2~~); and

a gate (~~G~~);

a Zener diode (~~D1~~) connected between said gate (~~G~~) and said source (~~S~~) of said MOSFET transistor (~~T1~~);

a gate resistor (~~R<sub>v</sub>~~) connected between said gate (~~G~~) of said MOSFET transistor (~~T1~~) and a positive pole (~~+V<sub>bat1</sub>~~) of the first accumulator (~~BAT1~~); and

a diode (~~D2~~) connected in parallel with said gate resistor (~~R<sub>v</sub>~~), for conducting current in a direction from said gate (~~G~~) to the positive pole (~~+V<sub>bat1</sub>~~) of the accumulator (~~Bat1~~);

wherein when a short circuit to the high on board electrical system voltage is conducted to said drain, said MOSFET transistor turns on or remains turned on.

Claim 8 (currently amended): The device according to claim 7, wherein said electronic module is disposed in control device (~~ST~~) for controlling low-power consumers or for processing/transmitting data.

Claim 9 (currently amended): The device according to claim 7, wherein said Zener diode (~~D1~~) is configured with a breakdown voltage (~~V<sub>z</sub>~~) lower than a maximum permitted gate source voltage (~~V<sub>gs</sub>~~) of said MOSFET transistor (~~T1~~).

Claim 10 (currently amended): The device according to claim 7, wherein said MOSFET transistor (~~T1~~) has a threshold voltage (~~V<sub>th</sub>~~) and, in an event of a short circuit to a highest voltage of the on-board electrical system active at the device connection (~~A, A1, A2~~), a source voltage (~~V<sub>s</sub>~~) of said transistor (~~T1~~) is limited to a value  $V_s = V_{bat1} - V_{th}$ , where  $V_s$  is the source voltage,  $V_{bat1}$  is

the low on-board voltage (~~V<sub>bat1</sub>~~), and  $V_{th}$  is the threshold voltage of said transistor (~~T1~~).

Claim 11 (currently amended). The device according to claim 7, wherein, on occurrence of a short circuit to a highest voltage of the on-board electrical system active at the device connection (~~A, A1, A2~~), said diode (~~D2~~) connected in parallel to said gate resistor (~~R<sub>v</sub>~~) limits the gate voltage (~~V<sub>g</sub>~~) of said MOSFET transistor (~~T1~~) to a value  $V_g = V_{bat1} + V_d$ , wherein  $V_g$  is the gate voltage,  $V_{bat1}$  is the low on-board voltage (~~V<sub>bat1</sub>~~), and  $V_d$  is a conducting state voltage (~~V<sub>d</sub>~~) of said diode (~~D2~~).

Claim 12 (currently amended): The device according to claim 7, with the protective circuit (~~Ss, Ssa, Ssb~~) integrated in an ASIC.

Claim 13 (original): The device according to claim 7, wherein the multi-voltage on-board electrical system is a motor vehicle on-board electrical system.